

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for the joining of TiAl components with a braze having a melting temperature lower than a melting temperature of the TiAl components, comprising:

aligning the TiAl components to form a braze joint therebetween into which molten braze can be deposited;

depositing the braze into the braze joint;

directly heating only heating the braze with a laser beam to a temperature at which the braze is molten but which temperature is below a melting temperature of the TiAl components, so that the braze adheres to the TiAl components;

preventing primary heat input into the TiAl components and limiting heating of the TiAl components to an amount insufficient to 1) change a structure of the components; and 2) substantively change dimensions of the components due to thermal expansion.

2. (Cancelled)

3. (Cancelled)

4. (Previously Presented) A method in accordance with Claim 1, wherein TiAl sheets are joined.

5. (Original) A method in accordance with Claim 4, wherein the components are joined with a braze gap.

6. (Original) A method in accordance with Claim 5, wherein the components are butt-joined.

7. (Original) A method in accordance with Claim 6, wherein joining is accomplished under protective gas.

8. (Original) A method in accordance with Claim 7, wherein the components are positioned relative to each other at room temperature and under atmospheric pressure.

9. (Original) A method in accordance with Claim 8, wherein a ductile braze is used.

10. (Previously Presented) A method in accordance with Claim 9, wherein the molten bath is protected from sagging by a backing bar.

11. (Original) A method in accordance with Claim 10, wherein the braze is fed in the form of a wire.

12. (Original) A method in accordance with Claim 10, wherein the braze is fed in the form of powder.

13-20. (Cancelled)

21. (Original) A method in accordance with Claim 1, wherein the components are joined with a braze gap.

22. (Original) A method in accordance with Claim 1, wherein the components are butt-joined.

23. (Original) A method in accordance with Claim 1, wherein joining is accomplished under protective gas.

24. (Original) A method in accordance with Claim 1, wherein the components are positioned relative to each other at room temperature and under atmospheric pressure.

25. (Original) A method in accordance with Claim 1, wherein a ductile braze is used.

26. (Previously Presented) A method in accordance with Claim 1, wherein the molten bath is protected from sagging by a backing bar.

27. (Original) A method in accordance with Claim 1, wherein the TiAl components are joined with a filled joint.
28. (Original) A method in accordance with Claim 1, wherein the TiAl components are joined by an overlapping joint.
29. (Original) A method in accordance with Claim 1, wherein the TiAl components are joined without a braze gap.
30. (Original) A method in accordance with Claim 4, wherein the TiAl components are joined with a filled joint.
31. (Original) A method in accordance with Claim 4, wherein the TiAl components are joined by an overlapping joint.
32. (Original) A method in accordance with Claim 4, wherein the TiAl components are joined without a braze gap.
33. (Previously Presented) A method in accordance with claim 1, wherein the braze is melted prior to deposition into the braze joint.
34. (Previously Presented) A method in accordance with claim 1, wherein the braze is melted after deposition into the braze joint.
35. (Previously Presented) A method in accordance with claim 1, wherein the braze is melted during deposition into the braze joint.